BOEHRINGER INGELHEIM
RESPIRATORY RESEARCH & DEVELOPMENT TIMELINE

1921

Lobelin, the first stimulant-based respiratory product, is introduced as an emergency drug for arrested breathing

1941

Isoproterenol is launched, an anti-asthmatic treatment breaking new ground in asthma treatment

1975

Ipratropium Bromide aerosol is launched, a short-acting anti-cholinergic for the treatment of patients with chronic obstructive pulmonary disease (COPD)

1985

Development of Tiotropium Bromide begins

1995

Launch of Ipratropium Bromide+Salbutamol for the treatment of COPD

2002

First launches of Tiotropium HandiHaler® in COPD take place in several European and Asian countries

SPIRIVA® (tiotropium)

2005

Tiotropium becomes the world's most prescribed COPD maintenance treatment[1]

2007

Nintedanib (OFEV®) starts clinical development programme for the treatment of IPF[2]

2011

Initiation of TOviTO® phase III clinical trial programme investigating efficacy and safety of Tiotropium/Olodaterol Respimat® in COPD

TOviTO®

2012

Launch of Ipratropium Bromide+Salbutamol Respimat® for the treatment of COPD in the US

2013

Nintedanib receives orphan medicinal product designation from the European Commission in IPF

2013

Results from TIOSPIR®[iii] confirm similar safety and efficacy of Tiotropium HandiHaler® and Tiotropium Respimat®[3]

TIOSPIR™ Tiotropium Safety and Performance in Respimat

2013

First approval of Olodaterol Respimat®[4] – an effective LABA specifically designed as a preferred combination partner to Tiotropium[3,5]

STRIVERDI® RESPIMAT®

2014

Nintedanib receives FDA approval

OFEV® nintedanib

2014

Results from Phase III INPULSIS® trials show Nintedanib significantly slows disease progression in patients with IPF compared to placebo[6]

INPULSIS®-1

2014

Approval of Tiotropium Respimat® for use in adult asthma patients by regulatory authorities in the EU, Japan and many other countries

SPIRIVA® RESPIMAT® (tiotropium)

2015

Start of large-scale DYNAGITO® trial assessing potential benefit of Tiotropium+Olodaterol Respimat® compared to Tiotropium Respimat® on exacerbations in patients with COPD[7]

Tiotropium+Olodaterol Respimat® receives first approvals as a once-daily COPD maintenance treatment in countries worldwide

DYNAGITO® OTEMTO® NEW ONCE-DAILY SPIOLTO® RESPIMAT® TIOTROPIUM & OLODATEROL

2015

Nintedanib receives approval in EU, Japan and many other countries

Nintedanib included in the updated International Treatment Guidelines for IPF[8]

2015

First patient enrolled in the Phase III SENSCIS™ (Safety and Efficacy of Nintedanib in Systemic SClerosIS) study investigating Nintedanib in people with systemic sclerosis who also develop interstitial lung disease (SSc-ILD)[9]

2015

Approval of Tiotropium Respimat® for use in asthma patients 12+ in the US and inclusion of Tiotropium Respimat® for adults with asthma in the updated 2015 Global Strategy for Asthma Management and Prevention (GINA)[10]

2016

Updated GINA 2016 strategy includes Tiotropium Respimat® as an add-on option for patients aged 12+[11]

2016

To date, Tiotropium has acquired 50 million patient-years of real-life experience across all COPD severities which has helped to shape COPD clinical practice worldwide[12]

2016

Nintedanib receives orphan-drug designation from FDA for treatment of systemic sclerosis (including the associated interstitial lung disease)

To date more than 20,000 patients worldwide have been treated with Nintedanib[12]

2017

First patient enrolled in the Phase III PF-ILD (progressive fibrosing insterstitial lung disease) trial investigating the efficacy and safety of Nintedanib in a range of progressive fibrosing lung conditions other than idiopathic pulmonary fibrosis[13]

2017

Approval of Tiotropium Respimat® as asthma maintenance treatment for children aged 6+ in the US / Paediatric approvals in further countries for patients 1+[14]

ASTHMA

COPD

IPF + SSC-ILD AND PF-ILD

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3. Buhl R, Maltais F, Abrahams R, et al. Tiotropium and olodaterol –fixed-dose combination versus mono-components in COPD (GOLD 2–4), Eur Respir J. 2015;45(4):969–979
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12. Boehringer Ingelheim. IPF data on file, 2016
13. Clinicaltrials.gov. Efficacy and Safety of Nintedanib in Patients with Progressive Fibrosing Interstitial Lung Disease (PF-ILD). Available at: https://clinicaltrials.gov/ct2/show/NCT02999178 [last accessed July 2017]
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